

Work Order ID 104303

July-09-13 11:52:11 AM

\*104303\*

Page 1

Item ID: D3874-2

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Floor protector - pilot (sub-com D206-781-011)

Stop

\*NS2\*

Start Date: 7/04/13 Start Qty: 1.00 \*1\*

Required Date: 7/09/13 Req'd Qty: 1.00 \*1\*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: MLS

Date: 13-07-11 Tooling:

Date:

Run

Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_ SPC (Y/N):

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3874	A								
100		0.00							
*100*									
HandThermo	Memo	0.00							
Hand Finishing Thermoforming	I-Cut Sheet to required Blank size								
105	Dry Material	0.00							
*105*									
HandThermo	Memo	0.00							
Hand Finishing Thermoforming	Dry Sheet as per QSI022 POLYCARBONATE								
	Temp: <u>240°F</u>								
	Time IN: <u>7:00 pm</u>	<u>13/08/01</u>							
	Time OUT: <u>7:00 am</u>	<u>13/08/02</u>							

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General									
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>					
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>					
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>					
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>					
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>					
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>						
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>						
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		Other <input type="checkbox"/>					
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>							
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>							
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>							

**Work Order ID 104303**

July-09-13 11:52:11 AM

**\*104303\***

Page 2

Item ID: D3874-2

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Floor protector - pilot (sub-com D206-781-011)

Stop

**\*NS2\***Start Date: 7/04/13 Start Qty: 1.00 **\*1\***Required Date: 7/09/13 Req'd Qty: 1.00 **\*1\***

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 <b>*110*</b> Thermoform Thermoforming Machine	Memo 1-Machine Set-Up 2-Pre-heat Tool to required temp. 3-Thermoform as per Dwg and Folio #FTA039 using tool DT9474 Dwg Rev: <u>A</u> Folio Rev: <u>B</u>  Visually inspect for proper formation and texture	0.00				x 1			<i>Sh</i> <i>13/08/08</i>
140 <b>*140*</b> HandThermo Hand Finishing Thermoforming	Memo 1-Trim to finished dimensions as per Dwg	0.00				x 1			<i>Sh</i> <i>13/08/08</i>
150 <b>*150*</b> QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo Complete FAI document	0.00							<i>Sh</i> <i>13/08/08</i>

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only 

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
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			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
Part No. _____			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
NCR No. _____										

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>	Other <input type="checkbox"/>	
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

Work Order ID 104303

\*104303\*

Page 3

July-09-13 11:52:11 AM

Item ID: D3874-2

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Floor protector - pilot (sub-com D206-781-011)

Stop \*NS2\*

Start Date: 7/04/13 Start Qty: 1.00 \*1\*

Required Date: 7/09/13 Req'd Qty: 1.00 \*1\*

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

160

QC5- Inspect part completeness to step on W/O

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

\*160\*

QC

Quality Control

02  
B8-8

170

Identify as per dwg & Stock Location:

0.00

PNP 103547

0.00

\*170\*

Packaging

Packaging

MLJ 130813

180

QC21- Final Inspection - Work Order Release

0.00

\*180\*

QC

Quality Control

0.00

MLJ 130813

MLJ 130812

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

Work Order update only 

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
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			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
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Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
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Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
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Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

**Picklist Print**

July-09-13 11:52:11 AM

Page 1

Work Order ID: 104303

Parent Item: D3874-2

Parent Item Name: Floor protector - pilot (sub-com D206-781-011)

Start Date: 7/04/13

Required Date: 7/09/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A 09.02.06 New Issue DL  
Material 10/04/21 DL

IPP Rev B Add Step 105 Dry

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.118-90318-08 Lexan Sheet		Purchased	No			100	sf	430.9100	4.38	4.38			

Location	Loc Qty	Loc Code
therm	430.91 430.91	

113127

4.38 sq ft

JL  
(3/08/02.)

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
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			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Training									
Transport									
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## FAULT CATEGORY

Landing Gear	General			
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Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

DART AEROSPACE LTD	Work Order:	104303
Description: Floor Protector	Part Number:	D3874-2
Inspection Dwg: D3874	Rev: A	Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

## **THERMOFORMING SECTION**

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>1/4</u> "				
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by:

W. H.

Date:

13/08/02

## TRIMMING SECTION

Measured by:

9645

Date:

15/08/08

**Audited by:**

27

Date:

3-8-8

### Prototype Approval:

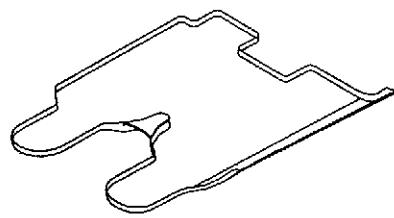
N/A

Date: \_\_\_\_\_

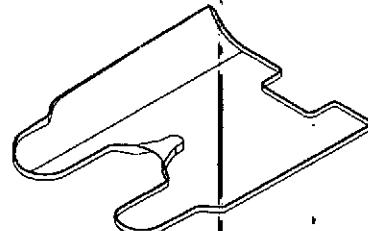
NA

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	AA





D3874-1 FLOOR PROTECTOR



D3874-2 FLOOR PROTECTOR

SHIP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE  
WORK ORDER  
104303-NLJ

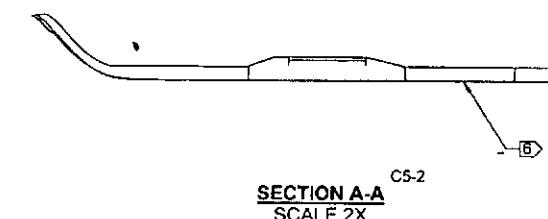
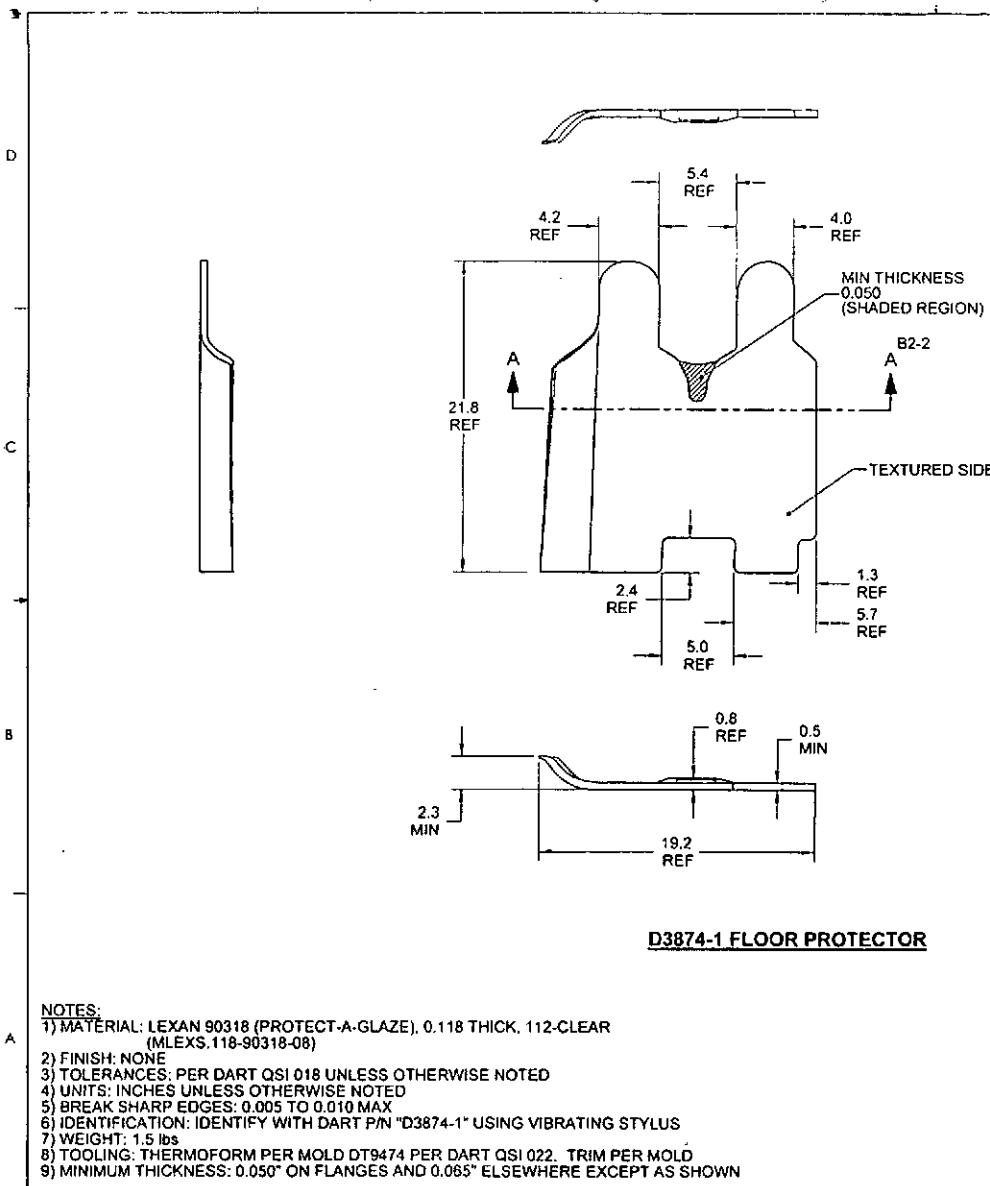
13-07-11

RELEASED  
09/05/2011

A	NEW ISSUE	PH	09 01 29
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3874	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		FLOOR PROTECTOR	NTS
DATE	09.01.29	COPYRIGHT © 2001 BY DART AEROSPACE LTD	
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		NOT TO BE MADE PUBLIC OR DISCLOSED OR COPIED IN WHOLE OR IN PART	
		WHEN THIS INFORMATION IS NO LONGER REQUIRED	



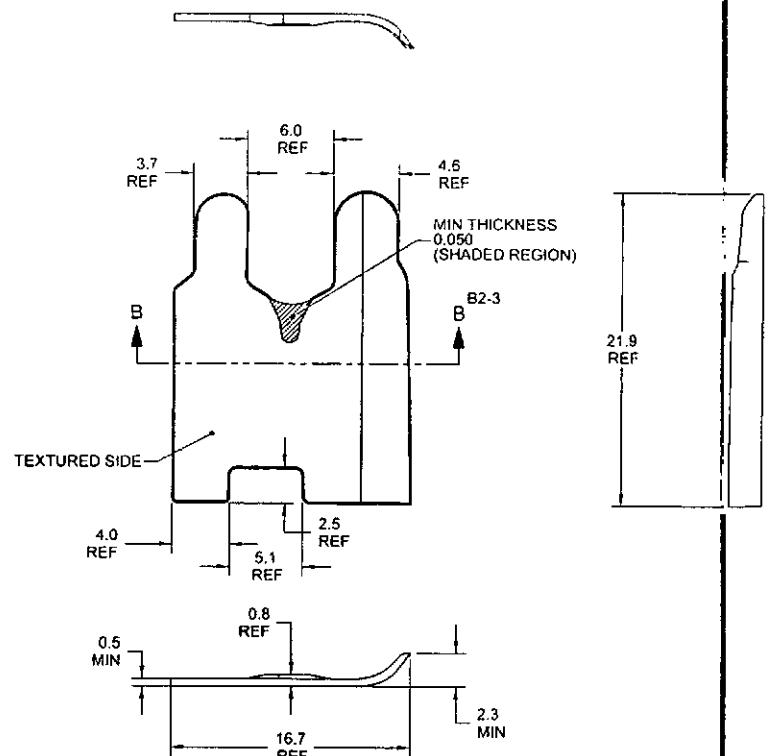
104303



RELEASED  
1-25-05 M

DESIGN	AM	DART AEROSPACE LTD HAWKSBURY, ONTARIO, CANADA		
DRAWN	PM			
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		D3874	SHEET 2 OF 3	
APPROVED		TITLE	SCALE	
DE APPR.		FLOOR PROTECTOR	NTS	
DATE	09.01.29	COPYRIGHT © 2004 BY DART AEROSPACE LTD		
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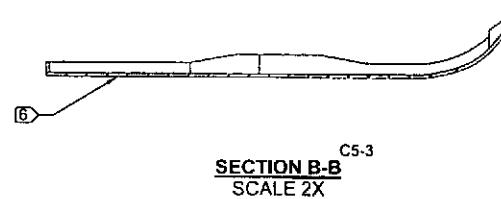




D3874-2 FLOOR PROTECTOR

## NOTES:

- 1) MATERIAL: LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3874-2" USING VIBRATING STYLUS
- 7) WEIGHT: 1.5 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9474 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.055" ELSEWHERE EXCEPT AS SHOWN

SECTION B-B  
SCALE 2XRELEASED  
10/05/03

DESIGN	<i>Ref</i>	DART AEROSPACE LTD
DRAWN	<i>Ref</i>	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>Ref</i>	DRAWING NO.
MFG. APPR.	<i>Ref</i>	D3874
APPROVED	<i>Ref</i>	REV. A
DE APPR.	<i>Ref</i>	SHEET 3 OF 3
DATE	09.01.29	TITLE
		SCALE
		NTS
		FLOOR PROTECTOR
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